CLAIMS

1. Method of improving the mechanical strength after ageing, particularly in a wet medium, of an insulation product, especially a thermal and/or acoustic insulation product, based on mineral wool provided with a size comprising a thermosetting resin, especially a phenolic resin,
in which method a latex is added to the size during the manufacture of the product.

2. Method according to Claim 1, in which the product is based on mineral wool capable of dissolving in a physiological medium, especially containing a proportion of alkali metal oxides of about 8 to 25% by weight of the wool.

3. Method according to Claim 1 or 2, in which the latex is based on an aqueous dispersion or emulsion of a polymer carrying hydrophilic functional groups, especially hydroxyl, carboxyl or ester functional groups.

4. Method according to Claim 3, in which the polymer is derived from one or more monomers each carrying at least one hydrophilic functional group.

5. Method according to Claim 3 or 4, in which the latex contains a polymer or copolymer which is of the vinyl type, especially a vinyl acetate homopolymer or copolymer, or of the acrylic type and/or which is derived from a carboxylic acid.

6. Method according to Claim 5, in which the latex is chosen from:

- a polyvinyl acetate homopolymer, a vinyl acetate/(meth)acrylic acid or ester copolymer, a vinyl acetate/maleic ester copolymer, a vinyl acetate/olefin copolymer, a vinyl acetate/vinyl chloride copolymer;
- a silanized acrylonitrile/acrylic ester or styrene/acrylic acid or ester copolymer.

7. Method according to one of Claims 1 to 3, in which the latex is based on an aqueous dispersion or emulsion of particles consisting of a polymer surrounded by a surfactant or by a protective colloid

having hydrophilic functional groups, especially one based on polyvinyl alcohol or on cellulose.

8. Method according to Claim 7, in which the latex comprises a silanized or non-silanized vinyl chloride/ethylene copolymer or a silanized or non-silanized vinyl chloride/vinyl laurate/ethylene terpolymer.

9. Method according to any one of Claims 3 to 8, in which a water-repellent agent, such as a silicone or a fluorinated compound, is added to the latex.

10. Method according to any one of the preceding claims, in which the latex is based on a polymer having a glass transition temperature T_g of less than 80°C and especially of less than 50°C.

11. Method according to any one of the preceding claims, in which the latex is based on a polymer having a glass transition temperature T_g of greater than -5°C and especially of greater than 0°C.

12. Method according to any one of the preceding claims, in which the solids content of the latex introduced is less than 5%, especially about 0.01 to 5%, by weight with respect to the weight of mineral wool.

13. Method according to any one of the preceding claims, in which the latex is mixed with the size before application to the mineral wool.

14. Method according to any one of Claims 1 to 12, in which the latex is applied to the mineral wool separately from the size.

15. Insulation product, especially a thermal and/or acoustic insulation product, based on mineral wool provided with a size based on a thermosetting resin, especially a phenolic resin, in which the size contains a latex which improves the mechanical strength of the product after ageing, particularly in a wet medium.

16. Insulation product according to Claim 15, in which the mineral wool consists of glass or rock wool capable of dissolving in a physiological medium,

especially containing a proportion of alkali metal oxides of about 8 to 25% by weight of the mineral wool.

17. Insulation product according to Claim 16, in which the mineral wool dissolves in a saline solution simulating a physiological medium at a rate of at least 30 and especially at least 40 or 50 ng/cm² per hour, measured at pH 4.5, and at a rate of at least 30 and especially at least 40 or 50 ng/cm² per hour, measured at pH 7.5.

18. Insulation product according to one of Claims 15 to 17, which has a density of at least 30 kg/m³, especially at least 50 kg/m³ and particularly at least 80 kg/m³.

19. Use of a latex with a size for an insulation product, especially a thermal and/or acoustic insulation product, based on mineral wool, in order to improve the mechanical strength after ageing, particularly in a wet medium, of the product.

20. Use of a latex according to Claim 19, by mixing it in the size or by spraying it separately.

21. Sizing composition for an insulation product, especially a thermal and/or acoustic insulation product, comprising a thermosetting resin and a latex.